

FORM PTO-1449

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S  
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.  
236/092SERIAL NO.  
09/128,718APPLICANT:  
Michael J. Heller et al.FILING DATE:  
August 3, 1998GROUP:  
1631

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## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE  | NAME               | CLASS | SUBC<br>CLASS | FILING DATE |
|---------------------|-----------------|-------|--------------------|-------|---------------|-------------|
| AA                  | 3,950,738       | 4/76  | Hayashi et al.     | 365   | 185           | 7/74        |
| AB                  | 3,995,190       | 11/76 | Salgo              | 313   | 391           | 12/75       |
| AB1                 | 4,225,410       | 9/80  | Pace               | 204   | 195           | 12/78       |
| AC                  | 4,283,773       | 8/81  | Daughton et al.    | 364   | 132           | 4/79        |
| AD                  | 4,563,419       | 1/86  | Ranki et al.       | 435   | 6             | 12/83       |
| AE                  | 4,580,895       | 4/86  | Patel              | 356   | 39            | 10/83       |
| AF                  | 4,584,075       | 4/86  | Goldstein et al.   | 204   | 522           | 11/84       |
| AG                  | 4,594,135       | 6/86  | Goldstein          | 204   | 551           | 2/85        |
| AG1                 | 4,661,451       | 4/87  | Hansen             | 435   | 174           | 2/84        |
| AH                  | 4,751,177       | 6/88  | Stabinsky          | 435   | 6             | 6/85        |
| AI                  | 4,787,963       | 11/88 | MacConnell         | 204   | 450           | 5/87        |
| AJ                  | 4,807,161       | 2/89  | Comfort et al.     | 364   | 550           | 12/87       |
| AK                  | 4,816,418       | 3/89  | Mack et al.        | 436   | 518           | 7/85        |
| AL                  | 4,822,566       | 4/89  | Newman             | 422   | 82            | 5/87        |
| AM                  | 4,828,979       | 5/89  | Klevan et al.      | 435   | 6             | 11/84       |
| AN                  | 4,908,112       | 3/90  | Pace               | 210   | 198           | 6/88        |
| AO                  | 5,063,081       | 11/91 | Cozzette et al.    | 435   | 4             | 8/90        |
| AP                  | 5,074,977       | 12/91 | Cheung et al.      | 205   | 775           | 10/90       |
| AQ                  | 5,075,077       | 12/91 | Durley, III et al. | 422   | 56            | 8/88        |
| AR                  | 5,096,669       | 3/92  | Lauks et al.       | 422   | 61            | 9/88        |
| AS                  | 5,096,807       | 3/92  | Leaback            | 435   | 6             | 12/89       |
| AT                  | 5,125,748       | 6/92  | Bjornson et al.    | 356   | 414           | 5/91        |
| AU                  | 5,126,022       | 6/92  | Soane et al.       | 204   | 458           | 2/90        |
| AV                  | 5,143,854       | 9/92  | Pirung et al.      | 436   | 518           | 3/90        |
| AW                  | 5,164,319       | 11/92 | Hafeman et al.     | 435   | 287           | 11/89       |
| AX                  | 5,166,063       | 11/92 | Johnson            | 435   | 173           | 6/90        |
| AY                  | 5,200,051       | 4/93  | Cozzette et al.    | 204   | 403           | 11/89       |
| AZ                  | 5,202,231       | 4/93  | Drmanac et al.     | 435   | 6             | 6/91        |
| BA                  | 5,219,726       | 6/93  | Evans              | 435   | 6             | 6/89        |
| BB                  | 5,227,265       | 7/93  | DeBoer et al.      | 430   | 41            | 11/90       |

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|  | <b>APPLICANT:</b><br>Michael J. Heller et al. |                                 |
|  | <b>FILING DATE:</b><br>August 3, 1998         | <b>GROUP:</b><br>1631           |

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|    |           |       |                  |     |     |       |
|----|-----------|-------|------------------|-----|-----|-------|
| BC | 5,234,566 | 8/93  | Osman et al.     | 204 | 403 | 4/91  |
| BD | 5,242,797 | 9/93  | Hirschfeld       | 435 | 6   | 1/92  |
| BE | 5,304,487 | 4/94  | Wilding et al.   | 435 | 29  | 5/92  |
| BF | 5,312,527 | 5/94  | Mikkelsen et al. | 205 | 777 | 10/92 |
| BG | 5,433,819 | 7/95  | McMeen           | 216 | 20  | 5/93  |
| BH | 5,434,049 | 7/95  | Okano et al.     | 435 | 6   | 2/93  |
| BI | 5,436,129 | 7/95  | Stapleton        | 435 | 6   | 10/93 |
| BJ | 5,445,525 | 8/95  | Broadbent et al. | 439 | 64  | 5/94  |
| BK | 5,464,517 | 11/95 | Hjerten et al.   | 204 | 183 | 1/95  |
| BL | 5,468,646 | 11/95 | Mattingly        | 436 | 501 | 1/95  |
| BM | 5,516,698 | 5/96  | Begg et al.      | 436 | 89  | 4/92  |
| BN | 5,527,670 | 6/96  | Stanley          | 435 | 6   | 8/94  |
| BO | 5,593,838 | 1/97  | Zanzucchi et al. | 435 | 6   | 5/95  |
| BP | 5,605,662 | 2/97  | Heller et al.    | 422 | 68  | 11/93 |
| BQ | 5,632,957 | 5/97  | Heller et al.    | 422 | 68  | 9/94  |
| BR | 5,653,939 | 8/97  | Hollis et al.    | 422 | 50  | 8/95  |
| BS | 5,660,701 | 8/97  | Grushka et al.   | 204 | 451 | 2/96  |
| BT | 5,681,751 | 10/97 | Begg et al.      | 436 | 89  | 5/95  |
| BU | 5,750,015 | 5/98  | Soane et al.     | 204 | 454 | 3/96  |
| BV | 5,849,486 | 12/98 | Heller et al.    | 435 | 6   | 8/96  |
| BW | 6,013,166 | 1/00  | Heller           | 204 | 469 | 4/94  |
| BX | 6,017,696 | 1/00  | Heller et al.    | 435 | 6   | 7/94  |

| FOREIGN PATENT DOCUMENTS |                 |      |                        |       |          |                 |                |  |
|--------------------------|-----------------|------|------------------------|-------|----------|-----------------|----------------|--|
| EXAMINER INITIAL         | DOCUMENT NUMBER | DATE | COUNTRY                | CLASS | SUBCLASS | TRANSLATION YES | TRANSLATION NO |  |
| BY                       | 0228075         | 7/87 | EP (Dattagupta et al.) |       |          |                 |                |  |
| BZ                       | 2247889         | 3/92 | GB (Stanley)           |       |          |                 |                |  |
| CA                       | WO95/07363      | 3/95 | PCT (Konrad)           |       |          |                 |                |  |
| CB                       | WO90/01564      | 2/90 | PCT (Adams et al.)     |       |          |                 |                |  |
| CC                       | WO89/01159      | 2/89 | PCT (Cornell et al.)   |       |          |                 |                |  |

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| EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE  | COUNTRY              | CLASS | SUBC<br>CLASS | TRANSLATION<br>YES NO |
|---------------------|-----------------|-------|----------------------|-------|---------------|-----------------------|
| CD                  | WO93/22678      | 11/93 | PCT (Hollis)         |       |               |                       |
| CE                  | WO86/03782      | 7/86  | PCT (Malcolm et al.) |       |               |                       |
| CF                  | WO89/10977      | 11/89 | PCT (Southern)       |       |               |                       |
| CG                  | WO88/08528      | 11/88 | PCT (Stanbro et al.) |       |               |                       |
| CH                  | WO92/04470      | 3/92  | PCT (Stanley)        |       |               |                       |
| CI                  | WO98/51819      | 11/98 | PCT (Heller et al.)  |       |               |                       |
| CJ                  | WO96/01836      | 1/96  | PCT (Heller et al.)  |       |               |                       |
| CK                  | WO98/01758      | 1/98  | PCT (Kovacs)         |       |               |                       |
| CL                  | 2156074         | 10/85 | UK (Palva et al.)    |       |               |                       |
| CM                  | 57087           | 87    | Yugoslavia (Drmanac) |       |               |                       |

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|    |  |
|----|--|
| CN | Abrams et al. "Comprehensive Detection of Single Base Changes In Human Genomic DNA Using Denaturing Gradient Gel Electrophoresis & a GC Clamp". <i>Genomics</i> , 7, 1990, 463-475                     |
| CO | Anand and Southern "Pulsed Field Gel Electrophoresis," <u>Gel Electrophoresis of Nucleic Acids - A Practical Approach</u> , 2d. Ed., D. Rickwood and B.D. Hames (New York: IRL Press 1990), pp 101-123 |
| CP | Anderson and Young, "Quantitative Filter Hybridization," <u>Nucleic Acid Hybridization - A Practical Approach</u> , Eds. B.D. Hames and S.J. Higgins (Washington, D.C. : IRL Press 1985) pp 73-111     |
| CQ | Bains, "Setting a Sequence to Sequence a Sequence," <i>Bio/Technology</i> , 10:757-758 (1992)  |
| CR | Barinaga, "Will 'DNA Chip' Speed Genome Initiative?", <i>Science</i> , 253:1489 (1991)   |
| CS | Beattie et al., "Genosensor Technology," <u>The 1992 San Diego Conference: Genetic Recognition</u> , pp 1-5 (Nov, 1992)  |
| CT | Beltz et al., "Isolation of Multigene Families and Determination of Homologies by Filter Hybridization Methods," <i>Methods in Enzymology</i> , 100:266-285 (1983)                                     |
| CU | Brown et al. "Electrochemically Induced Adsorption of Radio-Labelled DNA on Gold and HOPG Substrates for STM Investigations". <i>Ultramicroscopy</i> , 38, 1991, 253-264                               |
| CV | Conner et al., "Detection of Sick Cell $\beta^3$ -Globin Allele by Hybridization With Synthetic Oligonucleotides," <i>Proc. Natl. Acad. Sci. USA</i> , 80:278-282 (1983)                               |

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|  |    |  |
|--|----|--|
|  | CW | Drmanac et al., "Sequencing of Megabase Plus DNA by Hybridization: Theory of the Method," <i>Genomics</i> , 4:114-128 (1989)   |
|  | CX | Drmanac et al., "DNA Sequence Determination by Hybridization: A Strategy for Efficient Large-Scale Sequencing," <i>Science</i> , 260: 1649-1652 (1993)                                       |
|  | CY | Eggers et al. "Biochip Technology Development", BioChip Technology Development, Lincoln Laboratory Technical Report 901, Nov. 9, 1990  |
|  | CZ | Riaccabrino et al., "Array of Individually Addressable Microelectrodes", <i>Sensors and Actuators B</i> , 18-19 (1994) 675-677   |
|  | DA | Fodor et al., "Multiplexed Biochemical Assays With Biological Chips," <i>Nature</i> , 364:555-556 (1993)   |
|  | DB | Fodor et al., "Light-Directed, Spatially Addressable Parallel Chemical Synthesis," <i>Science</i> , 251:767-773 (1992)   |
|  | DC | Horejsi, "Some Theoretical Aspects of Affinity Electrophoresis," <i>Journal of Chromatography</i> , 178:1-13 (1979) <i>Not considered</i>  |
|  | DD | Horejsi et al., "Determination of Dissociation Constants of Lectin Sugar Complexes by Means of Affinity Electrophoresis, <i>Biochimica et Biophysica Acta</i> , 499:200-300 (1977)           |
|  | DE | Kakerow et al., "A Monolithic Sensor Array of Individually Addressable Microelectrodes", <i>Sensors and Actuators A</i> , 43 (1994) 296-301  |
|  | DF | Mathews, Kricka. "Analytical Strategies For The Use Of DNA Probes". <i>Analytical Biochemistry</i> , 169, 1988, 1-25   |
|  | DG | Palecek. "New Trends in Electrochemical Analysis of Nucleic Acids". <i>Bioelectrochemistry and Bioenergetics</i> , 20, 1988, 179-194   |
|  | DH | Ranki et al., "Sandwich Hybridization as a Convenient Method for the Detection of Nucleic Acids in Crude Samples," <i>Gene</i> , 21:77-85 (1983)   |
|  | DI | Saiki, "Amplification of Genomic DNA," <i>PCR Protocols: A Guide to Methods and Applications</i> , (Academic Press, Inc. 1990), pp 13-20   |
|  | DJ | Southern et al., "Analyzing and Comparing Nucleic Acid Sequences by Hybridization to Arrays of Oligonucleotides Evaluation Using Experimental Models," <i>Genomics</i> , 13:1008-1017 (1992) |
|  | DK | Strezoska et al., "DNA Sequencing by Hybridization: 100 Bases Read by a Non-Gel-Based Method", <i>Proc. Natl. Acad. Sci. USA</i> , 88:10089-93 (1991)  |

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|    |  |
|----|--|
| DL | Wallace et al., "Hybridization of Synthetic Oligodexribonucleotides to $\phi$ x 174 DNA: The Effect of Single Base Pair Mismatch," <i>Nucleic Acid Res.</i> , 6:3543-3557 (1979) |
| DM | Washizu, "Electrostatic Manipulation of Biological Objects," <i>Journal of Electrostatics</i> , 25:109-123 (1990)  |
| DN | Washizu and Kurosawa, "Electrostatic Manipulation of DNA in Microfabricated Structures," <i>IEEE Transactions on Industry Applications</i> , 26:1165-1172 (1990)                 |

not considered

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